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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PERKEY, WILLIAM B

ART UNIT PAPER NUMBER

2851

DATE MAILED: 09/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/063,103

Applicant(s)

SOMMERS, MATHEW

Examiner

William B. Perkey

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08/12/03
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawakami (US 2002/0025157 A1) in view Singer et al. (U.S. Patent No. 5,813,752) and acknowledged prior art..

The embodiment of Fig. 9 in the Kawakami reference described at paragraphs 0090-0096 an electronic flash 70 which inherently includes a housing with an opening in order to let out the light from the milky white LED 71. Kawakami does not show the white LED being one of a UV-phosphor or a blue-phosphor. Singer et al. discloses a construction of a white LED (column 2 line 38) that can be used for lighting purposes (column 2 line 35). Singer et al. discloses that white LEDs were known to be constructed of a UV or blue phosphor at the time of applicant's invention. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to construct the milky white LED in the embodiment of Fig. 9 of Kawakami using conventional UV or blue phosphor LED technology in order to obtain the desirable result of building the white LED flash unit with a high brightness and to obtain the desirable feature of encompassing a wide color range.

Kawakami does not show a cover lens for this LED or several of flash features specified in the dependent claims. Applicant within the body of his disclosure acknowledges that many of these features were known at the time of applicant's invention for conventional photographic flash apparatus. The examiner further took Official Notice that these additional features were known at the time of applicant's invention (see MPEP 2144.02) in the previous Office action. This subject matter is now taken to be acknowledged prior art, since it was not traversed in applicant's response. In re Cleveland, 139 F.2d 71, 60 USPQ (CCPA 1943). To provide the flash apparatus of Kawakami with conventional flash photographic features such as cover lenses, reflectors, fresnel lenses, etc. would have been obvious to one of ordinary skill in the art in order to physically carry out the construction of a single white LED flash unit as contemplated by the figure 9 embodiment of Kawakami.

Since LEDs were notoriously well known to be highly directional at the time of applicant's invention, it would have been clearly apparent that for this embodiment of the reference, a reflector would not absolutely be necessary but would be optional.

3. Claims 1-19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Document No. 2000-235245 in view of Kawakami (U.S. Patent Document No. 2002/0025157 A1) and Singer et al. and acknowledged prior art.

Fig. 1 of the Japanese Document shows a camera having a red, green and blue LED in the flash unit of a camera for illuminating the subject for photography. The housing has an opening over which a cover 44 is placed in front of the LEDs. A power source is shown in the circuit diagram of Fig. 8. Fig. 9 of Kawakami teaches providing a photographic flash unit with only a

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single white LED for illuminating the subject, instead of the three LED system of red, green and blue of the first embodiment. It would have been obvious to one of ordinary skill in the art at the time of applicants invention to substitute a single white LED or a plurality of white LEDs for the red, green and blue LED system in Fig. 1 of the Japanese Document, since the prior art teaches that either type may be used for photographic flash purposes in order to reduce the number of required LEDs and reducing the power requirements from the battery as well as to obtain a wider color range of illumination.

Other features of applicant's dependent claims which may not be shown by the Japanese document have been acknowledged by the applicant within his disclosure to be known within the flash photography prior art, or Official Notice (MPEP 2144.03) was taken that such features were known, and as such cannot serve as the patentably distinguishing limitation within the claims. Applicant's have not traversed this.

The dependent claims calling for a plurality of LEDs is not a patentable limitation. To use a plurality of white LEDs instead of the one white LED suggested by Kawakami would have been obvious to one of ordinary in order to produce a multiplied effect such as covering a greater area or achieving a greater intensity. Mere duplication of parts has no patentable significance, unless a new and unexpected result is produce. *In re Harza*, 274F.2d 669, 124 USPQ 378 (CCPA 1960); MPEP 2144.04 VI. B.

Applicant's assert there is no motivation to combine the references of this rejection. This rejection does not literally combine the references. This rejection substitutes the R,G, and B LEDs of the Japanese document with a white LED of the known UV or blue phosphor type.

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Kawakami explicitly teaches the desirability of substituting a white LED for the trio of R, G, and B diodes which combined together produce a white light output.

***Response to Arguments***

Applicant asserts that there is no motivation to combine the references because the references relate to different fields of technology and seek to solve different problems.

Applicant points out that Kawakami relates to cameras with an electronic flash using LEDs and uses only short, high intensity bursts of light. Whereas, Singer relates to enhancement of the extraction of light from a UV/blue LED phosphor device by locating a short wave pass filter between the LED and the phosphor layer and is for continuous light emitting devices, not short bursts of light. Applicant also asserts that the use of UV or blue-phosphor technology does not necessarily connote higher brightness.

The examiner has carefully reviewed the references in view of applicant's remarks. First, the examiner clarifies that the proposed use of the UV or blue-phosphor LED in Kawakami or the Japanese document does not necessarily include the particular short wave pass filter. Singer is not relied on for its teaching of its disclosed particular improvement in the field of UV or blue-phosphor LED technology, but that UV or blue-phosphor technology per se was known at the time of applicants invention. Furthermore, Singer teaches in column 1 lines 55-63 that UV or blue-phosphor LEDs provide a wider color range than other LEDs, a characteristic which is desirable in illumination applications. Photography is an illumination application where a wide color range of illumination is desirable for obtaining a better picture. Thus, applicant's assertion that there is no motivation to use UV or blue-phosphor LED technology in the photography systems of Kawakami or the Japanese document is not found persuasive, especially since at

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some types of UV or blue-phosphor LEDs produce sufficient high brightness to enable photography.

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

### **Telephone Numbers**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William B. Perkey whose telephone number is (703) 308-1708. The examiner can normally be reached on Monday-Thursday 7:00am-5:30pm.

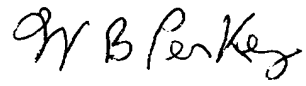
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on (703) 308-2847. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

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A handwritten signature in black ink, appearing to read "W B Perkey". The signature is written in a cursive, flowing style.

William B. Perkey  
Primary Examiner  
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WBP:wbp